

WISCONSIN ECONOMIC INDICATORS

JULY 1987



DILHR

DEPARTMENT OF
INDUSTRY, LABOR & HUMAN RELATIONS

WISCONSIN DATA AND SOURCES

INDICATOR	SOURCE
L1 Composite Index of Leading Indicators	Wis. Dept. of Industry, Labor and Human Relations
L2 Average Work Week, Manufacturing	Wis. Dept. of Industry, Labor and Human Relations
L3 Average Overtime Hours, Mfg	Wis. Dept. of Industry, Labor and Human Relations
L4 Average Weekly Initial Claims	Wis. Dept. of Industry, Labor and Human Relations
L5 Total Job Openings Received	Wis. Dept. of Industry, Labor and Human Relations
L6 New Business Incorporations	Wisconsin Secretary of State
L7 Net Gain in Business Phone Access Lines	Wis. Telephone Co. and General Telephone Co.
L8 Building Plans Examined	Wis. Dept. of Industry, Labor and Human Relations
C1 Help-Wanted Advertising Index (Milw.)	National Industrial Conference Board
C2 Total Unemployment Rate	Wis. Dept. of Industry, Labor and Human Relations
C3 Natural Gas Sales	Wisconsin Public Service Commission
C4 New Car Registrations	Wis. Department of Transportation
C5 Electric Power Sales	Wisconsin Public Service Commission
C6 Total Securities Registrations	Wisconsin Commissioner of Securities
C7 Manufacturing Employment	Wis. Dept. of Industry, Labor and Human Relations
C8 Average Weekly Earnings, Mfg	Wis. Dept. of Industry, Labor and Human Relations
C9 Cash Receipts From Farm Marketing	U.S. Department of Agriculture
C10 Contract Construction Employment	Wis. Dept. of Industry, Labor and Human Relations
X1 Birth Registrations	Wis. Department of Health and Social Services
X2 Death Registrations	Wis. Department of Health and Social Services
X3 Natural Net Gain in Population	Wis. Department of Health and Social Services
X4 Marriage Registrations	Wis. Department of Health and Social Services
X5 Consumer Price Index (Milwaukee)	U.S. Bureau of Labor Statistics
X6 Index of Prices Received By Farmers	Wisconsin Department of Agriculture
X7 Net Gain in Residential Phone Access Lines	Wis. Telephone Co. and General Telephone Co.
X8 Labor Disputes, No. of Workers	Wis. Dept. of Industry, Labor and Human Relations
X9 Unemployment Compensation Exhaustees	Wis. Dept. of Industry, Labor and Human Relations

NOTES: Selected series are seasonally adjusted by the Bureau of the Census X-11 Variant of the Census Method II Seasonal Adjustment Program. The adjusted data are plotted on arithmetic scales.

SECTION A is a summary of recent data and current changes for all indicators and is presented in chart form. The indicators are presented with cyclical timing as the principle basis of classification.

SECTION B is a summary of Wisconsin Labor Force Estimates, including Employment, Unemployment and Unemployment Rates, and selected U.S. data.

SECTION C analyzes the Wisconsin labor force by industry and by specified Standard Metropolitan Statistical Areas.

SECTION D singles out certain economic time series as being leading or coinciding in relation to movements in aggregate economic activity. They are seasonally adjusted and presented graphically. The indicators are grouped by cyclical timing.

COVER PHOTO: Courtesy of Wisconsin Division of Tourism Development

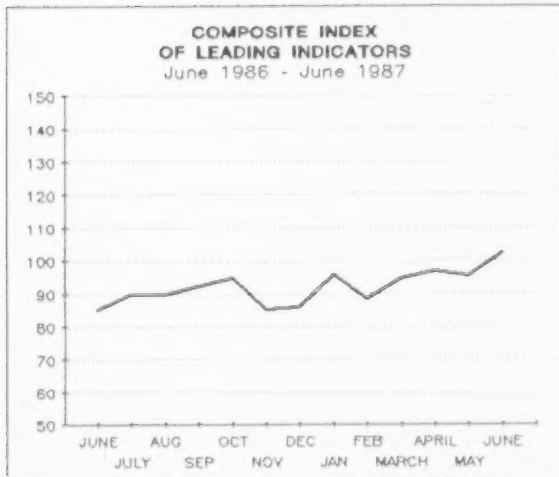
WISCONSIN ECONOMIC INDICATORS

SUMMARY FOR JUNE

COMPOSITE INDEX

The Composite Index of Wisconsin's leading economic indicators increased sharply in June, reaching 102.3 points. This June is the first month since April of last year that the index surpassed the 100 point base.

Most of this month's leading indicators showed positive signals for the economy. The single exception is the average weekly initial claims count, which increased in excess of the normal seasonal claims growth for June. More than offsetting the claims increase is a well-above-normal increase in the number of job openings received by public Job Service offices throughout the state.



LEADING INDICATORS

The average workweek in Wisconsin's manufacturing industries lengthened to 41.4 hours in June, a two-tenths of an

hour increase. Some increase is normal, but this month's growth exceeds the usual seasonal trend a bit.

The average workweek was boosted by a large increase of overtime hours in June. Production workers averaged 3.7 hours of overtime per week, up from a 3.4 hour average one month earlier.

Had the overtime average followed the normal seasonal trend, the weekly average would have amounted to 3.5 hours. And that would have translated to a flat pattern in the total average workweek. As it is, not only have production hours increased but the total employment level in manufacturing grew by over thirteen thousand workers.

The average weekly initial claims, representing newly laid off workers throughout the state, increased by nearly seven hundred in June. That's an increase of nearly twelve percent. Yet, the average weekly claims in June is the second lowest level this year and is lower than the level one year ago.

Of significance is that the total initial claims for June outnumbered the increase of unemployment by a multiple of five and a half to one. That indicates a large amount of labor turnover and instability. Total unemployment increased by over five thousand, primarily due to labor force growth.

The total number of job openings received by state Job Service offices grew by over 13 hundred, well above the normal June trend.

New business incorporations, the net gain in business telephone access lines, and building plans examined all had gains surpassing normal seasonal patterns.

A

WISCONSIN ECONOMIC INDICATORS

INDICATOR	UNIT	MONTHLY SERIES			% CHANGE		AVG.	
		Latest Month		Mo/Ago	Yr/Ago	Mo/Ago	Yr/Ago	1986
LEADING INDICATORS								
L1 COMPOSITE INDEX OF LEADING INDICATORS								
Seasonally Adjusted	INDEX	102.3	Jun	95.2	85.0	7.5	20.4	93.0
L2 AVG. WORK WEEK, MFG.								
Unadjusted	HOURS	41.4	Jun	41.2	41.0	0.5	1.0	41.4
Seasonally Adjusted		41.4		41.3	41.0	0.2	1.0	
L3 AVG. OVERTIME HOURS, MFG.								
Unadjusted	HOURS	3.7	Jun	3.4	3.4	8.8	8.8	3.6
Seasonally Adjusted		3.8		3.6	3.5	5.6	8.6	
L4 AVG. WEEKLY INITIAL CLAIMS								
Unadjusted	NUMBER	6,615	Jun	5,921	6,671	11.7	- 0.8	8,802
Seasonally Adjusted		8,197		7,700	8,264	6.5	- 0.8	
L5 TOTAL JOB OPENINGS REC.								
Unadjusted	NUMBER	8,558	Jun	7,203	7,776	18.8	10.1	7,743
Seasonally Adjusted		8,081		6,584	7,342	22.7	10.1	
L6 NEW BUSINESS INCORPORATIONS								
Unadjusted	NUMBER	523	Jun	491	619	6.5	15.5	539
Seasonally Adjusted		483		446	572	8.3	15.6	
L7 NET GAIN IN BUSINESS PHONES ACCESS LINES								
Unadjusted	NUMBER	2,431	Jun	2,378	1,043	2.2	133.1	1,276
Seasonally Adjusted		2,060		1,908	1,253	8.0	64.4	
L8 BUILDING PLANS EXAMINED								
Unadjusted	NUMBER	763	Jun	613	511	24.5	49.3	560
Seasonally Adjusted		681		565	456	20.5	49.3	
ROUGHLY COINCIDING INDICATORS								
C1 HELP-WANTED INDEX (MILW.)								
Seasonally Adjusted	INDEX	66	Mar	69	57	- 4.3	15.8	60
C2 UNEMPLOYMENT RATE, TOTAL								
Unadjusted	PERCENT	5.5	Jun	5.4	6.6	-	-	7.0
Seasonally Adjusted		5.9		5.7	7.0	-	-	
C3 NATURAL GAS SALES								
Unadjusted	MIL THERMS	89.9	May	151.0	132.1	-40.5	-31.9	214.6
Seasonally Adjusted		137.7		162.0	202.2	-15.0	-31.9	
C4 NEW CAR REGISTRATIONS								
Unadjusted	NUMBER	15,405	Jun	13,342	18,822	15.5	-18.2	16,947
Seasonally Adjusted		13,169		12,031	16,089	9.5	-18.1	
C5 ELECTRIC POWER SALES								
Unadjusted	MIL KWH	2,042.8	May	1,925.6	1,912.5	6.1	6.8	1,946.0
Seasonally Adjusted		2,101.6		2,044.2	1,968.1	2.8	6.8	
C6 TOTAL SECURITIES REGISTRATIONS								
Unadjusted	MIL DOL	119.0	Jun	224.1	194.2	-46.9	-38.7	171.0
Seasonally Adjusted		111.5		206.7	182.0	-46.1	-38.7	

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WISCONSIN ECONOMIC INDICATORS

INDICATOR	UNIT	MONTHLY SERIES			% CHANGE		AVG.	
		Latest Month		Mo/Ago	Yr/Ago	Mo/Ago	Yr/Ago	1986
C7 MANUFACTURING EMPL.								
Unadjusted	THOUS.	526.6	Jun	513.5	520.1	2.6	1.2	513.0
Seasonally Adjusted		520.4		517.6	513.7	0.5	1.3	
C8 AVG. WEEKLY EARNINGS, MFG.								
Unadjusted	DOLLARS	433.87	Jun	436.31	421.89	- 0.6	2.8	427.38
Seasonally Adjusted		434.30		437.18	422.26	- 0.7	2.9	
C9 CASH RECEIPTS FROM FARM MKTG.								
Unadjusted	MIL. DOL.	370.6	Mar	331.3	380.1	11.9	- 2.5	416.8
Seasonally Adjusted		386.0		363.7	395.8	6.1	- 2.5	
C10 CONTRACT CONSTRUCTION EMPL.								
Unadjusted	THOUS.	68.2	Jun	65.9	69.2	3.5	- 1.4	64.0
Seasonally Adjusted		62.1		64.2	63.0	- 3.3	- 1.4	
OTHER KEY INDICATORS								
X1 BIRTH REGISTRATIONS								
Unadjusted	NUMBER	6,749	Jun	5,505	6,252	22.6	7.9	6,033
Seasonally Adjusted		6,845		5,163	6,340			
X2 DEATH REGISTRATIONS								
Unadjusted	NUMBER	3,492	Jun	3,218	3,477	8.5	0.4	3,514
Seasonally Adjusted		3,695		3,177	3,677	16.3	0.5	
X3 NATURAL NET GAIN POPULATION								
Unadjusted	NUMBER	3,257	Jun	2,286	2,775	42.5	17.4	2,519
Seasonally Adjusted		3,190		1,988	2,718	60.5	17.4	
X4 MARRIAGE REGISTRATIONS								
Unadjusted	NUMBER	5,307	Jun	3,372	5,325	57.4	- 0.3	3,207
Seasonally Adjusted		3,854		2,902	3,867	32.8	- 0.3	
X5 CONSUMER PRICE INDEX (MILW.)								
Unadjusted	INDEX	330.7	Nov 1986	332.9	333.9	- 0.7	- 1.0	331.7
X6 PRICES RECEIVED BY FARMERS								
Unadjusted	INDEX	135	Jun	134	127	0.7	6.3	131
Seasonally Adjusted		137		136	129	0.7	6.2	
X7 NET GAIN IN RESIDENTIAL PHONES ACCESS LINES								
Unadjusted	NUMBER	98	Jun	-2,046	-3008	104.8	103.3	1,363
Seasonally Adjusted		1,566		1,544	871	1.4	79.8	
X8 LABOR DISPUTES, NO. OF WORKERS								
Unadjusted	NUMBER	392	Jun	24	1,895	1,533.3	-79.3	769
Seasonally Adjusted		408		55	1,972	641.8	-79.3	
X9 UNEMPL. COMPENSATION EXHAUSTEES								
Unadjusted	NUMBER	20,530	Jun	21,271	29,015	- 3.5	-29.2	26,223
Seasonally Adjusted		18,664		18,807	26,387	- 0.8	-29.3	

B

LABOR FORCE ESTIMATES

WISCONSIN LABOR FORCE ESTIMATES JUNE	(In Thousands)			Pct. Chg.	
	Latest Month *	Month Ago	Year Ago	Month Ago	Year Ago
<i>Unadjusted</i>					
CIVILIAN LABOR FORCE	2530.8	2480.0	2441.4	2.0	3.7
Employment (Inc. Labor Disputes)	2391.1	2345.7	2280.7	1.9	4.8
Unemployment	139.7	134.4	160.8	3.9	-13.1
Unemployment Rate	5.5	5.4	6.6	-	-
<i>Seasonally Adjusted</i>					
CIVILIAN LABOR FORCE	2472.5	2467.7	2389.1	0.3	3.6
Employment (Inc. Labor Disputes)	2328.2	2327.1	2220.7	0.0	4.8
Unemployment	146.3	140.6	168.4	4.1	-13.1
Unemployment Rate	5.9	5.7	7.0	-	-

WISCONSIN EMPLOYMENT ESTIMATES	(In Thousands)			Pct. Chg.	
	Latest Month	Month Ago	Year Ago	Month Ago	Year Ago
TOTAL NONFARM WAGE AND SALARY WORKERS	2089.3	2058.5	2042.2	1.5	2.3
<i>Unadjusted</i>					
Manufacturing	526.2	513.5	520.0	2.5	1.2
Mining	2.4	2.3	2.3	4.3	4.3
Contract Construction	68.2	65.9	68.7	3.5	- 0.7
Transportation and Public Utilities	94.5	94.1	93.2	0.4	1.4
Elec., Gas and Sanitary Services	18.1	17.6	17.7	2.8	2.3
Wholesale Trade	103.7	102.1	101.4	1.6	2.3
Retail Trade	396.2	388.9	382.9	1.9	3.5
General Merchandise	49.1	48.7	47.9	0.8	2.5
Finance, Insurance and Real Estate	112.7	111.3	108.8	1.3	3.6
Banking	28.6	28.2	28.0	1.4	2.1
Insurance	36.5	36.2	35.4	0.8	3.1
Service and Miscellaneous	452.3	446.5	436.8	1.3	3.5
Hospitals	68.9	68.1	67.2	1.2	2.5
Private Education	22.5	23.9	22.6	-5.9	- 0.4
Government	333.1	333.1	328.2	-0.2	1.5
State Government	81.7	86.4	79.9	-5.4	2.3
Local Government	222.3	218.6	219.4	1.7	1.3

UNITED STATES LABOR FORCE ESTIMATES	(In Thousands)			Pct. Chg.	
	Latest Month	Month Ago	Year Ago	Month Ago	Year Ago
<i>Seasonally Adjusted</i>					
CIVILIAN LABOR FORCE	119,517	119,993	118,005	-0.4	1.3
Employment	112,257	112,447	109,613	-0.2	2.4
Unemployment	7,260	7,546	8,392	-3.8	-13.5
Unemployment Rate	6.1	6.3	7.1	-	-

* Latest month data are preliminary

MANUFACTURING EMPLOYMENT (Unadjusted) JUNE	(In Thousands)		
	Latest Month	Month Ago	Year Ago
All Manufacturing (Including Canning)	526.2	513.5	520.0
All Manufacturing (Excluding Canning)	512.9	504.9	507.2
Durable Goods	316.4	312.8	314.1
Lumber and Wood Prod., (Except Furniture)	26.1	24.9	23.8
Sawmills and Planning Mills	3.2	3.2	3.2
Millwork, Veneer, Plywood & Prefab. Wood Prod.	13.8	12.8	11.9
Furniture and Fixtures	11.2	11.1	10.4
Household Furniture	4.7	4.7	4.4
Stone, Clay and Glass Products	9.5	9.1	8.4
Concrete, Gypsum and Plaster Products	5.0	4.7	4.1
Primary Metal Industries	18.6	18.4	19.3
Iron and Steel Foundries	9.8	9.5	9.9
Fabricated Metal Products	51.2	50.5	52.3
Heating Equipment (Except Electrical) & Plumbing Fixtures	7.0	6.9	6.6
Fabricated Structural Metal Products	12.2	12.0	12.7
Metal Stampings	10.3	10.2	10.5
Machinery (Except Electrical)	99.9	99.1	98.8
Engines and Turbines	19.4	19.9	18.1
Farm Machinery and Equipment	12.1	11.9	12.0
Const., Min. & Material Handling Mach. & Equip.	11.3	11.2	11.4
Metalworking Machinery and Equipment	10.8	10.7	11.0
Special Industry Machinery (Except Metalworking)	11.9	11.7	12.2
General Industrial Machinery and Equipment	14.0	13.7	13.8
Service Industry Machines	6.9	6.8	7.2
Electrical Machinery, Equipment and Supplies	47.3	47.2	48.6
Electrical Industrial Apparatus	15.3	15.2	16.2
Household Appliances	6.3	6.2	6.3
Transportation Equipment	32.1	32.3	31.5
Motor Vehicles and Equipment	25.2	25.2	23.9
Instruments and Related Products	10.8	10.6	11.5
Miscellaneous Manufacturing	9.6	9.5	9.4
Nondurable Goods	209.8	200.7	205.9
Food and Kindred Products	64.8	58.5	63.7
Meat Products	13.7	13.2	14.3
Dairy Products	18.3	17.7	17.7
Canning and Preserving	13.3	8.6	12.8
Bakery Products	5.2	5.1	4.5
Beverage Industries	7.5	7.2	7.5
Textile Mill Products	4.0	3.7	4.0
Knitting Mills	3.4	3.2	3.5
Apparel and Other Finished Products	7.1	6.8	6.5
Paper and Allied Products	50.6	49.5	50.5
Pulp and Paper Mills	31.6	30.8	31.7
Converted Paper and Paperboard Products	10.5	10.2	10.4
Paperboard Containers and Boxes	7.2	7.2	7.1
Printing, Publishing and Allied Industries	41.0	40.2	39.9
Newspapers	12.7	12.4	12.2
Commercial Printing	17.5	17.0	17.4
Chemicals and Allied Products	11.3	11.2	10.8
Rubber and Misc. Plastics Products	24.2	24.0	23.1
Miscellaneous Plastics Products	20.0	19.8	18.7
Leather and Leather Products	6.7	6.6	7.1
Leather Tanning and Finishing	1.7	1.7	1.7
Footwear (Except Rubber)	3.2	3.1	3.6
Other Nondurable Goods	-	-	-

C

WISCONSIN EARNINGS AND HOURS DATA

EARNINGS AND HOURS (Unadjusted) JUNE	Average Weekly Earnings			Average Weekly Hours		
	Latest Month	Mo. Ago	Yr. Ago	Latest Month	Mo. Ago	Yr. Ago
All Manufacturing (Incl. Canning)	\$434	\$436	\$422	41.4	41.2	41.0
All Manufacturing (Excl. Canning)	439	438	428	41.6	41.2	41.3
Durable Goods	445	444	430	41.9	41.6	41.2
Lumber/Wood Prod. (Exc. Furn.)	324	332	320	41.4	41.9	40.0
Furniture and Fixtures	338	347	317	42.1	43.0	40.8
Stone, Clay and Glass Products	426	431	413	44.9	45.4	43.5
Primary Metal Industries	445	432	421	43.8	42.2	42.4
Iron and Steel Foundries	453	430	422	44.8	42.2	42.5
Fabricated Metal Products	419	414	419	40.8	40.2	40.7
Fab. Structural Metal Prod.	439	442	428	44.3	44.2	41.8
Metal Stampings	448	443	437	39.9	38.9	39.9
Machinery (Except Electrical)	488	488	480	42.2	42.0	42.0
Engines and Turbines	526	537	516	40.8	41.4	40.9
Farm Machinery and Equip.	550	530	535	43.1	41.9	42.2
Const. and Related Mach.	454	455	460	42.2	41.9	41.9
Metalworking Mach. and Equip.	520	514	526	42.9	42.2	43.8
Spec. Ind. Mach. (Exc. Metal)	493	491	490	42.4	42.2	41.7
Gen. Industrial Mach. and Equip.	489	482	510	41.9	41.2	42.9
Electrical Mach., Equip. and Supp.	417	413	407	41.3	40.5	40.7
Electrical Industrial Apparatus	461	454	426	41.8	41.2	39.8
Transportation Equipment	601	602	535	42.5	42.7	40.6
Instruments and Related Prod.	375	367	371	41.6	40.6	41.4
Nondurable Goods	416	423	410	40.5	40.6	40.7
Food and Kindred Products	368	394	366	38.5	39.9	38.7
Meat Products	362	360	354	40.9	39.8	40.2
Dairy Products	401	401	400	40.6	40.5	40.8
Textile Mill Products	301	299	317	41.9	39.6	41.7
Apparel and Other Fin. Prod.	248	243	248	39.4	38.0	40.7
Paper and Allied Products	563	556	546	44.8	44.3	45.2
Pulp and Paper Mills	610	609	595	45.7	45.7	46.3
Printing, Pub. and Allied Prod.	423	426	425	38.0	37.6	38.8
Chemicals and Allied Products	474	477	448	41.9	41.7	39.4
Rubber and Misc. Plastics Prod.	337	331	330	40.3	39.9	40.1
Leather and Leather Products.	267	263	266	39.5	38.5	39.1

WISCONSIN EARNINGS AND HOURS DATA

EARNINGS AND HOURS (Unadjusted) JUNE	Average Hourly Earnings Including O.T.			Average Hourly Earnings Excluding O.T.		
	Latest Month	Mo. Ago	Yr. Ago	Latest Month	Mo. Ago	Yr. Ago
All Manufacturing (Incl. Canning)	\$10.48	\$10.59	\$10.29	\$10.02	\$10.13	\$ 9.93
All Manufacturing (Excl. Canning)	10.55	10.62	10.36	10.10	10.17	10.01
Durable Goods	10.61	10.68	10.43	10.21	10.28	10.16
Lumber/Wood Prod. (Exc. Furn.)	7.82	7.83	7.99	7.77	7.88	-
Furniture and Fixtures	8.03	8.08	7.77	7.78	7.72	7.58
Stone, Clay and Glass Products	9.48	9.50	9.49	9.10	9.13	-
Primary Metal Industries	10.15	10.24	9.94	9.69	9.81	9.56
Iron and Steel Foundries	10.12	10.20	9.92	9.64	9.73	9.60
Fabricated Metal Products	10.26	10.29	10.30	9.85	9.90	9.92
Fab. Structural Metal Prod.	9.90	10.00	10.25	9.39	9.48	9.88
Metal Stampings	11.23	11.38	10.96	10.85	11.05	10.63
Machinery (Except Electrical)	11.56	11.61	11.42	11.13	11.15	11.03
Engines and Turbines	12.89	12.98	12.61	12.30	12.31	12.19
Farm Machinery and Equip.	12.75	12.66	12.67	12.30	12.16	12.34
Const. and Related Mach.	10.75	10.86	10.98	10.44	10.53	10.65
Metalworking Mach. and Equip.	12.12	12.18	12.02	11.78	11.81	11.54
Spec. Ind. Mach. (Exc. Metal)	11.63	11.64	11.75	11.10	11.13	11.29
Gen. Industrial Mach. and Equip.	11.68	11.69	11.89	11.25	11.33	11.21
Electrical Mach., Equip. and Supp.	10.09	10.20	10.01	9.72	9.86	9.71
Electrical Industrial Apparatus	11.02	11.03	10.70	10.79	10.85	10.44
Transportation Equipment	14.14	14.09	13.18	13.43	13.39	12.78
Instruments and Related Prod.	9.01	9.05	8.96	9.73	8.82	8.76
Nondurable Goods	10.28	10.43	10.07	9.72	9.88	9.58
Food and Kindred Products	9.55	9.88	9.46	9.03	9.37	8.96
Meat Products	8.85	9.05	8.81	8.45	8.66	8.48
Dairy Products	9.87	9.89	9.80	9.34	9.39	9.33
Textile Mill Products	7.18	7.55	7.61	6.91	7.29	7.40
Apparel and Other Fin. Prod.	6.29	6.40	6.10	6.14	6.28	5.95
Paper and Allied Products	12.56	12.56	12.08	11.82	11.82	11.55
Pulp and Paper Mills	13.35	13.32	12.85	12.49	12.46	12.32
Printing, Pub. and Allied Prod.	11.14	11.34	10.95	-	-	-
Chemicals and Allied Products	11.32	11.44	11.38	10.96	11.12	11.07
Rubber and Misc. Plastics Prod.	8.37	8.30	8.24	8.04	7.98	7.93
Leather and Leather Products	6.76	6.84	6.81	6.49	6.57	6.49

C

SUMMARY OF RECENT WISCONSIN DATA

EARNINGS AND HOURS, MFG. Production Workers (Unadjusted) JUNE	Average Weekly						Average Hourly Earnings				
	Earnings			Hours			Including O.T.			Excluding O.T.	
	Latest Month	Month Ago	Year Ago	Latest Month	Month Ago	Year Ago	Latest Month	Month Ago	Year Ago	Latest Month	Month Ago
United States	\$406	\$403	\$396	41.1	40.9	40.8	9.88	9.86	9.71	-	-
Wisconsin	434	436	422	41.4	41.2	41.0	10.48	10.59	10.29	10.02	10.13
<i>Selected Areas</i>											
Appleton-Oshkosh (Calumet- Winnebago-Outagamie)	461	464	429	42.7	42.6	42.2	10.79	10.90	10.16	10.26	10.35
Beloit (City)	398	399	372	38.8	38.7	38.3	10.27	10.32	9.72	-	-
Eau Claire (Eau Claire-Chippewa)	451	430	420	41.8	40.3	40.8	10.79	10.68	10.29	10.10	10.07
Fond du Lac (County)	372	388	397	39.1	40.0	41.8	9.52	9.69	9.49	9.14	9.30
Green Bay (Brown County)	465	475	465	41.2	41.6	41.7	11.28	11.42	11.16	10.45	10.59
Janesville (City)	537	536	485	39.0	38.5	37.5	13.76	13.92	12.93	13.57	13.76
Janesville-Beloit (Rock County)	473	475	445	38.8	38.4	38.1	12.18	12.36	11.69	11.91	12.09
Kenosha (County)	567	552	457	44.2	43.0	40.9	12.83	12.84	11.17	11.73	11.73
La Crosse (County)	367	369	369	39.4	39.5	39.0	9.31	9.34	9.45	9.03	9.01
Madison (Dane County)	403	402	392	40.9	40.1	40.1	9.85	10.02	9.77	9.43	9.64
Manitowoc (County)	404	394	392	40.4	39.1	41.2	9.99	10.08	9.51	9.64	9.79
Milwaukee (Milwaukee-Ozaukee- Waukesha-Washington)	477	479	472	41.2	41.1	40.9	11.58	11.65	11.53	11.08	11.14
Racine (County)	453	449	447	40.6	40.0	41.2	11.16	11.23	10.86	10.93	10.98
Sheboygan (County)	396	401	373	41.7	41.0	39.7	9.50	9.77	9.39	9.01	9.32
Wausau (Marathon County)	429	419	404	43.3	42.5	41.5	9.90	9.85	9.74	9.42	9.38

EMPLOYMENT, MFG. (Unadjusted) JUNE	(In Thousands)			Percent Change	
	Latest Month	Month Ago	Year Ago	Month Ago	Year Ago
United States	19,151.0	18,991.0	19,081.0	0.8	0.4
Wisconsin	526.2	513.5	520.0	2.5	1.2
<i>Selected Areas</i>					
Appleton-Oshkosh (Calumet- Winnebago-Outagamie)	51.0	49.1	49.8	3.9	2.4
Beloit (City)	4.7	4.6	5.1	2.2	-7.8
Eau Claire (Eau Claire-Chippewa)	10.3	10.2	10.4	1.0	-1.0
Fond du Lac (County)	10.7	10.1	10.7	5.9	0.0
Green Bay (Brown County)	24.1	23.7	25.3	1.7	-4.7
Janesville (City)	10.2	9.9	10.8	3.0	-5.6
Janesville-Beloit (Rock County)	17.0	16.7	17.8	1.8	-4.5
Kenosha (County)	12.8	12.8	11.1	0.0	15.3
La Crosse (County)	10.1	10.1	10.3	0.0	-1.9
Madison (Dane County)	22.3	21.9	21.6	1.8	3.2
Manitowoc (County)	10.9	10.7	12.1	1.9	-9.9
Milwaukee (Milwaukee-Ozaukee- Waukesha-Washington)	166.3	165.5	169.2	0.5	-1.7
Racine (County)	23.9	23.8	24.6	0.4	-2.8
Sheboygan (County)	19.9	19.0	18.9	4.7	5.3
Wausau (Marathon County)	13.5	12.8	12.2	5.5	10.7

REBENCHMARKING: A STEP TOWARD ACCURACY

by Joseph Tumpach Jr.

A hypothetical conversation between a labor economist and a nuclear physicist turned to a comparison of their professions. "We physicists, chemists, and researchers in the physical sciences are so much more able to measure than you economists and social scientists. We can split a second of time into a thousand parts with quartz crystals, we can measure the mass of atoms and molecules with spectrometers, and we can slice matter to an accuracy of microscopic dimensions with a laser beam. You 'people' scientists rely on surveys that lose a thousand people just because of sampling errors and because of the nature of statistics."

The physicist was right. Data such as the number of employed and unemployed workers are estimates derived from surveys. A complete monthly count of the employed and unemployed would supply an accurate picture of the labor situation, but such complete coverage would be impossible. Even if labor market analysts had the resources, both people and money, we could not directly count each worker and employer...we simply do not have enough time each month to query each employee and employer for an enumeration. The national labor force exceeds 100 million workers and Wisconsin's labor pool surpasses 2 million. The number of employing establishments in the country is more than 5 million; and in the state, nearly 100 thousand.

Wisconsin's labor force data depend on a combination of survey data and an estimating method that depends heavily on unemployment compensation claims. As with all statistical methods, there are margins of error and other factors which introduce errors into the estimates.

If analysts rely on surveys, which contain a built-in margin of error, just how good are the data derived from a sample of the population? Could the error build over time; couldn't our employment and unemployment estimates get wider and wider off track with each succeeding month?

"Rebenchmarking," counters our fictional economist. "We simply put the estimates back on track once each year." Rebenchmarking is correcting past survey-derived estimates by using an actual count. Each monthly estimate for the past two years is adjusted so that the final month agrees with the complete count. Rebenchmarking is applied to total employment, to unemployment, and to employment within the various industries.

In the case of employment, the actual counts are administrative records, records required of employers by the unemployment compensation system. Each year, the national Bureau of Labor Statistics tallies the employment records of every state. Normally, new national benchmarks are determined for March of each year and include data for the most detailed industrial classification levels at which estimates were formerly made.

If we can rebenchmark once a year with actual records of employment, why can't we do it more often, say each quarter of the year, thereby keeping our estimates both as current and as accurate as possible? Because the time required to complete the benchmark process--from collection of the data to publication of the results--is usually about fifteen months. The employment reports that employers submit to state unemployment insurance agencies are used to determine the

unemployment tax obligation of the employer and are required each quarter of the year. The employer's tax obligation, by statute, is based on his or her past year's employment record. Thus, a five quarter time lag exists. The most recent Wisconsin data will soon be available for the fourth quarter of 1986.

Most, but not all, workers are covered by the unemployment insurance system. In Wisconsin, about ninety percent of all workers are covered, thus, rebenchmarking data comes from the quarterly reports. The remaining workers, not covered, are accounted for in the rebenchmarking process. The largest group of noncovered workers are employed by various churches throughout the state. Wisconsin relies on information supplied by the churches in a past survey to determine their employment level. Students working under work-study programs are also noncovered employees. The bulk of those are university students. The state collects employment data on them from the universities. Railroad employment, also not covered by the unemployment compensation system, is factored in--data for interstate railroads are obtained from the Interstate Commerce Commission. One group which has also been included in the benchmark data is employees of sheltered workshops. Such employment does not amount to a lot compared to the total labor force, and sheltered workshop employees usually work only part-time.

The quarterly reports and employer surveys reveal no unemployment levels. The number of unemployed is estimated each month with a complex formula that relies on a household survey and on unemployment compensation claims filed by laid-off individuals. The formula, however, does contain an employment component, so each time employment is rebenchmarked, the unemployment numbers are revised.

Given the limitations of estimating employment from samples even other factors can introduce errors in the monthly employment and unemployment figures. It is difficult to include survey results from newly formed businesses in a timely manner. Adjustment factors for new-business entry are recalculated in the rebenchmarking process.

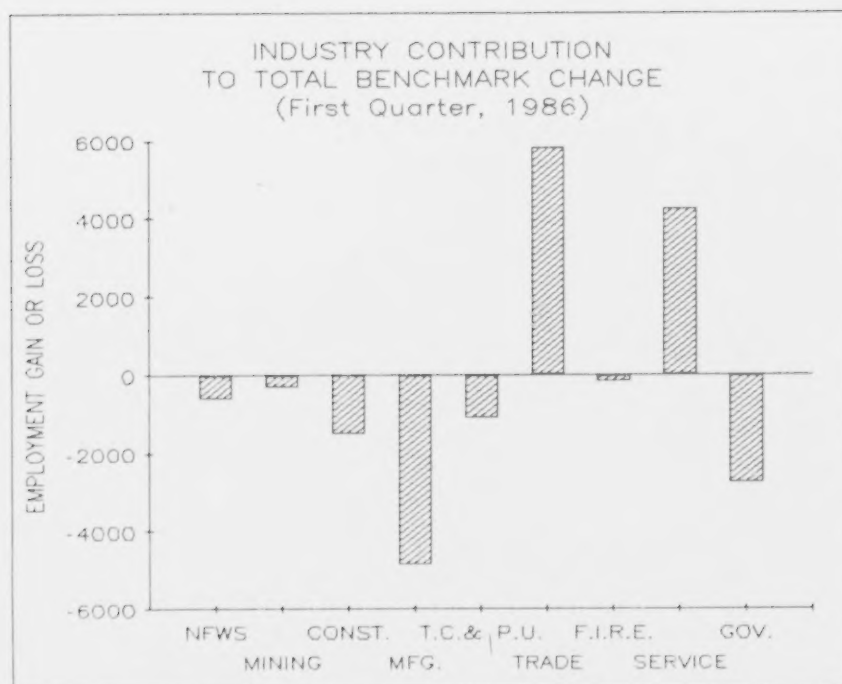
Estimates for various industries, particularly within manufacturing, can go awry because of changes of industry classification of employers. An establishment is classified according to the produce or service it produces. If, in a multi-product company, what was once a secondary product becomes a primary one, the establishment is reclassified. Employment, thus, may shift around among industries, causing a need for rebenchmarking.

Even with the limitations, the current employment statistics are the most accurate data possible using the present methods.

WISCONSIN ECONOMIC INDICATORS

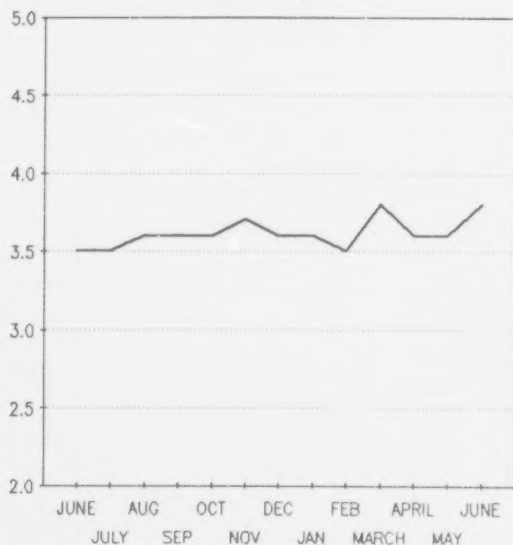
INDUSTRY CONTRIBUTION TO TOTAL BENCHMARK CHANGE (Employment, First Quarter, 1986)

Industry	1985 BM	1986 BM	Change
Nonfarm Wage & Salary	1,959,838	1,959,216	-622
Mining	1592	1273	-319
Construction	54,996	53,481	-1515
Mfg.	508,094	503,246	-4848
Transportation Communication & Public Utilities	92,696	91,598	-1098
Trade	450,413	456,257	5844
Finance Insurance and Real Estate	104,958	104,773	-185
Service	416,615	420,893	4278
Government	330,475	327,695	-2780

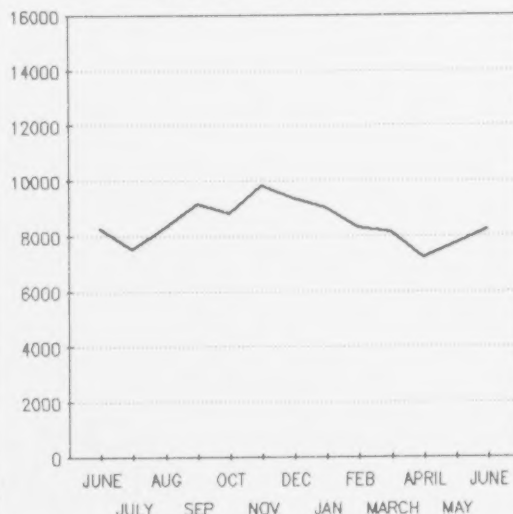


CYCLICAL INDICATORS

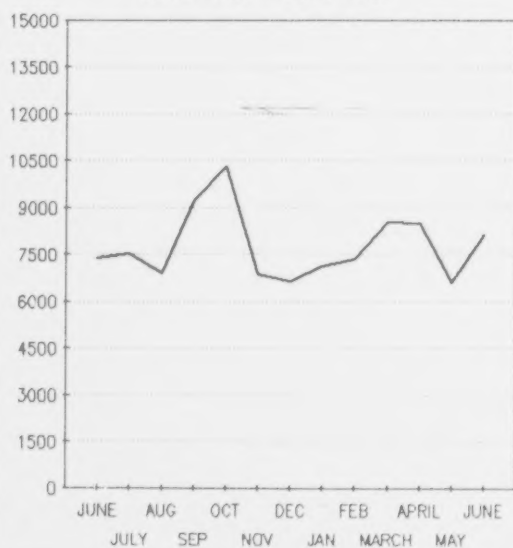
AVG. WEEKLY OVERTIME HOURS, MFG.
JUNE 1986 - JUNE 1987



**AVG. WEEKLY INITIAL CLAIMS
FOR UNEMPLOYMENT COMPENSATION**
JUNE 1986 - JUNE 1987



JOB OPENINGS RECEIVED
JUNE 1986 - JUNE 1987

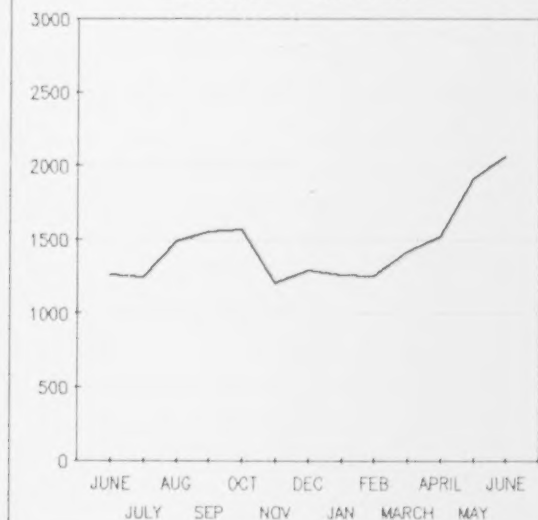


NEW BUSINESS INCORPORATIONS
JUNE 1986 - JUNE 1987



CYCLICAL INDICATORS

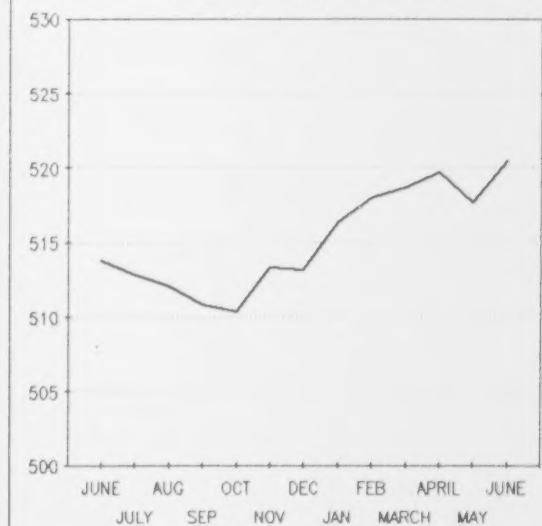
**NET GAIN IN BUSINESS
TELEPHONE ACCESS LINES**
JUNE 1986 - JUNE 1987



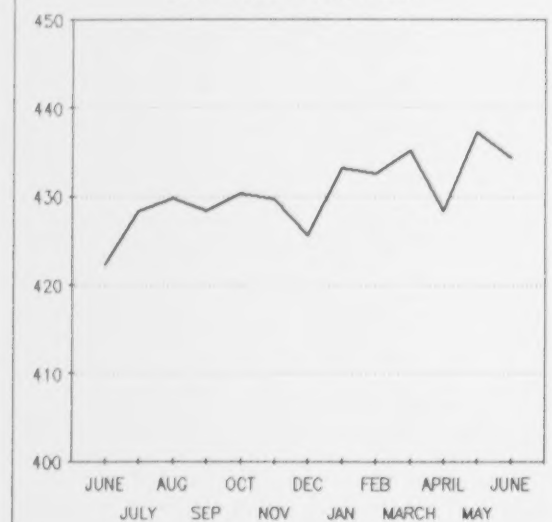
BUILDING PLANS EXAMINED
JUNE 1986 - JUNE 1987



MANUFACTURING EMPLOYMENT
(Thousands of workers)
JUNE 1986 - JUNE 1987



AVG. WEEKLY EARNINGS, MFG.
(Dollars)
JUNE 1986 - JUNE 1987



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